



Gulf of Mexico Harmful Algal Bloom Bulletin

10 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 7, 2007

Conditions Report

NE Florida: A harmful algal bloom has been identified from southern Volusia to northern Indian River County. Patchy moderate impacts are possible today through Thursday from southern Volusia to northern Indian River County, with patchy high impacts possible in southern Brevard County today through Thursday, December 13.

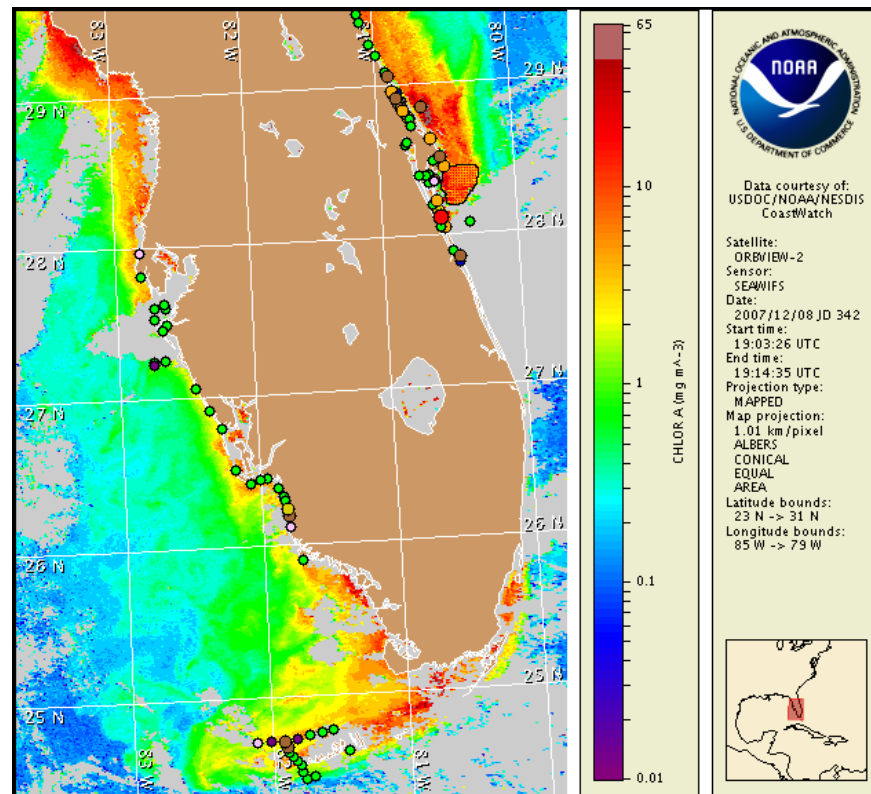
SW Florida: A harmful algal bloom has been identified in northern Collier County. Patchy very low impacts are possible today through Thursday. No other impacts are expected in southwest Florida through Thursday, December 13.

Analysis

NE Florida: The harmful algal bloom in northeast Florida persists from southern Volusia to northern Indian River County. Samples confirm medium concentrations of *Karenia brevis* alongshore Volusia and Brevard Counties from Cape Canaveral to Sebastian Inlet, as well as in the Mosquito Lagoon region of Volusia County (12/3, FWRI). A high concentration of *K. brevis* was confirmed at Paradise Beach Park in Brevard County (12/3, FWRI), as well as very low concentrations in Indian River Lagoon in Indian River County. *K. brevis* was not found this week in samples north of Ponce de Leon Inlet in Volusia County to St. Johns County. Chlorophyll levels remain elevated along much of the northeast Florida coast, with two regions of high chlorophyll ($>10\mu\text{g/L}$) alongshore Volusia and Brevard Counties from $28^{\circ}56'14''\text{N}$ $80^{\circ}39'23''\text{W}$ to $28^{\circ}43'35''\text{N}$ $80^{\circ}38'22''\text{W}$ and from $28^{\circ}24'3''\text{N}$ $80^{\circ}39''\text{W}$ to $28^{\circ}19'12''\text{N}$ $80^{\circ}33'13''\text{W}$, and offshore from $28^{\circ}54'29''\text{N}$ $80^{\circ}27'5''\text{W}$ to $28^{\circ}33'23''\text{N}$ $80^{\circ}21'44''\text{W}$, based on satellite imagery from 12/8. Onshore winds through Thursday will likely increase the potential for impacts along the coast. Slight northerly transport of the bloom is possible through Thursday.

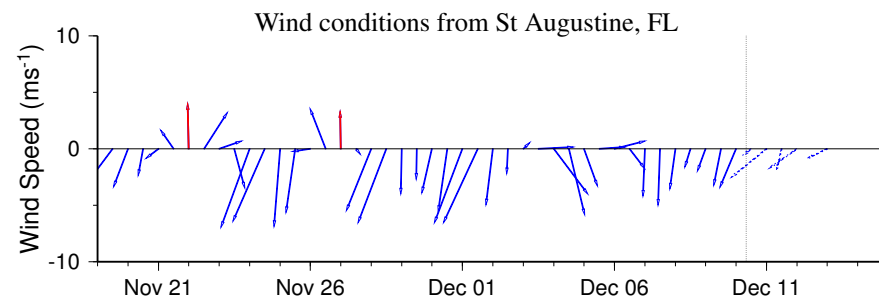
- Allen, Keller

Please refer to subsequent South Florida bulletin for analysis and information regarding southwest Florida and the Florida Keys.



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 3 to 6 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habfs/habfs_bulletin_guide.pdf

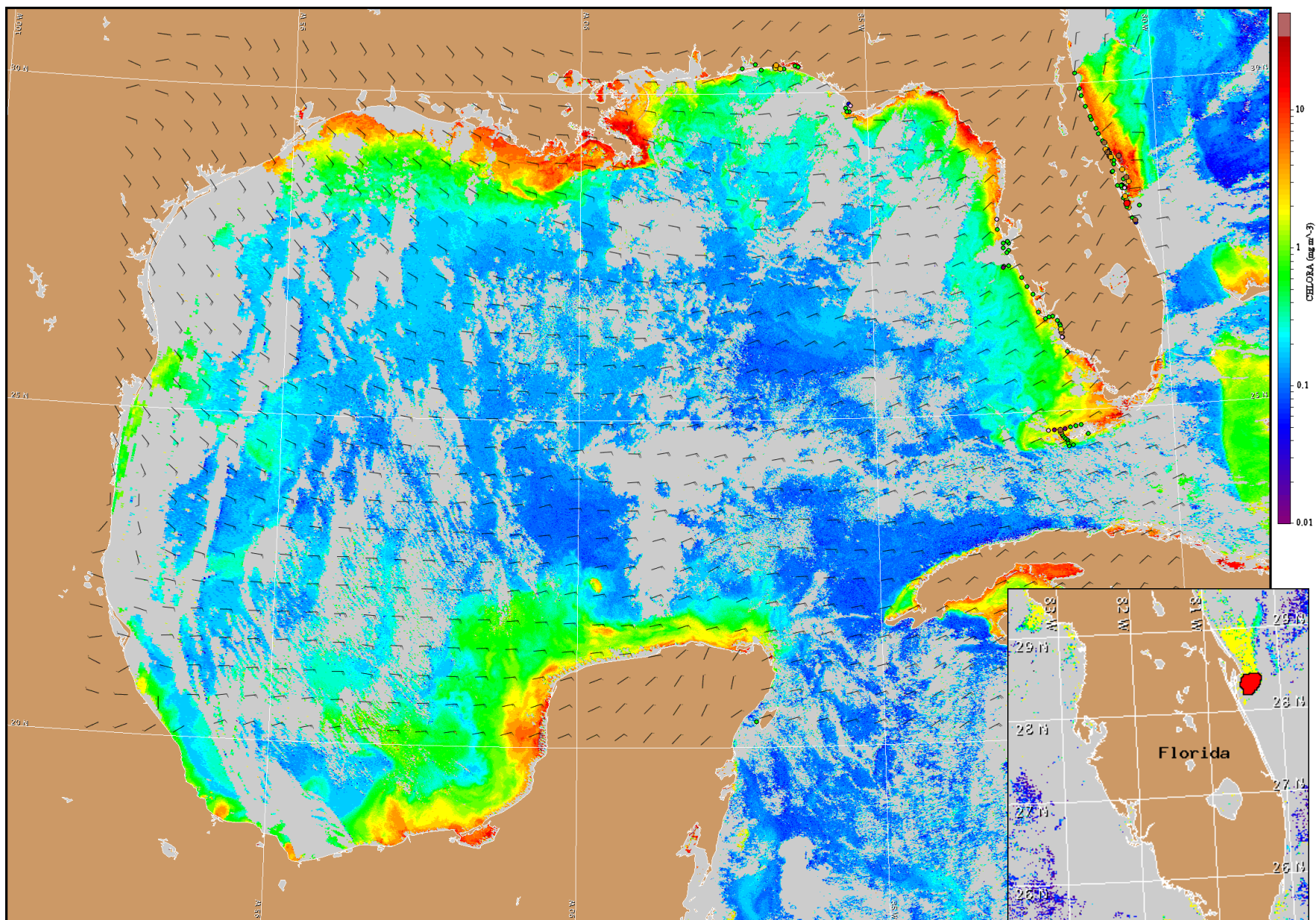


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

NE Florida: Easterly winds at 5-10 knots (3-5 m/s) today through Wednesday. Southeast-erly winds Thursday.

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.



Satellite chlorophyll image and forecast winds for December 11, 2007 12Z with Cell concentration sampling data from December 3 to 6 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).